Please replace the paragraph beginning at page 2, line 1, with the following rewritten paragraph:

--Immunoprecipitation of HUVEC detergent lysates with anti-CD39 mAb resulted in complete capture of cell-associated ADPase activity, suggesting that CD39 is the only ecto-ADPase on endothelial cells (Marcus et al., *J. Clin. Invest.* 99:1351, 1997). In the same study, COS cell transfectants expressing recombinant CD39 at the cell surface totally inhibited ADP-induced platelet aggregation. Thus, CD39 plays a prominent role in thromboregulation (*see also*, Gayle et al., *J. Clin. Invest.*, 101:1851, 1998; WO96/30532).

In the Claims

Cancel Claims 8 through 18.

Add new Claims 20 to 41.

- --20. A method according to Claim 1 wherein the soluble CD39 polypeptide has been produced by culturing a recombinant cell that encodes the soluble CD39 polypeptide under conditions permitting expression of the CD39 polypeptide, and recovering the expressed CD39 polypeptide.
- 21. A method according to Claim 5 wherein the soluble CD39 polypeptide has been produced by culturing a recombinant cell-that encodes the soluble CD39 polypeptide under conditions permitting expression of the CD39 polypeptide, and recovering the expressed CD39 polypeptide.
- 22. The method of claim 20 wherein the recombinant cell comprises a nucleic acid having a sequence selected from the group consisting of:
 - (a) SEQ ID NO:5; and
- (b) DNA sequences which, due to degeneracy of the genetic code, encode the polypeptide encoded by SEQ ID NO:5.

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- 23. The method of claim 21 wherein the recombinant cell comprises a nucleic acid having a sequence selected from the group consisting of:
 - (a) SEQ ID NO:5; and
- (b) DNA sequences which, due to degeneracy of the genetic code, encode the polypeptide encoded by SEQ ID NO:5.
- 24. The method of claim 20 wherein the recombinant cell comprises a nucleic acid having a sequence selected from the group consisting of:
 - (a) SEQ ID NO:7; and
- (b) DNA sequences which, due to degeneracy of the genetic code, encode the polypeptide encoded by SEQ ID NO:7.
- 25. The method of claim 21 wherein the recombinant cell comprises a nucleic acid having a sequence selected from the group consisting of:
 - (a) SEQ ID NO:7; and
- (b) DNA sequences which, due to degeneracy of the genetic code, encode the polypeptide encoded by SEQ ID NO:7.
- 26. The method of Claim 1 wherein the soluble CD39 polypeptide is administered in a composition comprising a pharmaceutically acceptable carrier.
- 27. The method of Claim 5 wherein the soluble CD39 polypeptide is administered in a composition comprising a pharmaceutically acceptable carrier.
- 28. The method of Claim 1 wherein the soluble CD39 polypeptide is administered in combination with at least one other antithrombotic or antiplatelet composition.
- 29. The method of Claim 5 wherein the soluble CD39 polypeptide is administered in combination with at least one other antithrombotic or antiplatelet composition.

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- 30. The method of claim 1 wherein the soluble CD39 polypeptide is administered in combination with aspirin.
- 31. The method of claim 5 wherein the soluble CD39 polypeptide is administered in combination with aspirin.
- 32. The method of Claim 1 wherein the soluble CD39 polypeptide is administered parenterally.
- 33. The method of Claim 5 wherein the soluble CD39 polypeptide is administered parenterally.
- 34. The method of claim 32 wherein the soluble CD39 polypeptide is administered intravenously.
- 35. The method of claim 33 wherein the soluble CD39 polypeptide is administered intravenously.
- 36. The method of Claim 1 wherein the mammal is suffering from unstable angina, myocardial infarction, stroke, coronary artery disease or injury, myocardial infarction, atherosclerosis, peripheral vascular occlusion, preeclampsia, embolism, a platelet-associated ischemic disorder including lung ischemia, coronary ischemia, and cerebral ischemia, a thrombotic disorder including coronary artery thrombosis, cerebral artery thrombosis, intracardiac thrombosis, peripheral artery thrombosis, venous thrombosis, thrombosis and coagulopathy associated with exposure to a foreign or injured tissue surface, deep venous thrombosis (DVT), pulmonary embolism (PE), transient ischemic attack (TIAs), or another related condition where vascular occlusion is the common underlying feature.
- 37. The method of Claim 5 wherein the mammal is suffering from unstable angina, myocardial infarction, stroke, coronary artery disease or injury, myocardial